

Title (en)  
PLASMA PROCESSING DEVICE

Title (de)  
PLASMAVERARBEITUNGSEINRICHTUNG

Title (fr)  
DISPOSITIF DE TRAITEMENT AU PLASMA

Publication  
**EP 1536671 A4 20060315 (EN)**

Application  
**EP 03730742 A 20030530**

Priority  
• JP 0306901 W 20030530  
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Abstract (en)  
[origin: EP1536671A1] A plasma processing apparatus includes a chamber (1) for carrying out plasma processing inside, a top plate (15) made of a dielectric material for sealing the upper side of this chamber (1), and an antenna section (3) which serves as high frequency supplying means for supplying high frequency waves into chamber (1) via this top plate (15). Top plate (15) is provided with reflecting members (23a, 23b) inside thereof. The sidewalls of reflecting members (23a, 23b) work as wave reflecting means for reflecting high frequency waves that propagate inside top plate (15) in the radius direction. Alternatively, no reflecting members may be provided in a manner where the sidewalls of a recess of top plate (15) serve as wave reflecting means. <IMAGE>

IPC 1-7  
**H05H 1/46**; **H01L 21/3065**

IPC 8 full level  
**H05H 1/46** (2006.01); **H01J 37/32** (2006.01); **H01L 21/3065** (2006.01)

CPC (source: EP KR US)  
**H01J 37/32192** (2013.01 - EP US); **H01J 37/32238** (2013.01 - EP US); **H01L 21/3065** (2013.01 - KR); **H05H 1/46** (2013.01 - KR)

Citation (search report)  
• No further relevant documents disclosed  
• See references of WO 03105544A1

Citation (examination)  
• EP 0830052 A1 19980318 - SUMITOMO METAL IND [JP]  
• JP 2000357683 A 20001226 - HITACHI LTD  
• JP H09232099 A 19970905 - HITACHI LTD, et al  
• US 5234526 A 19930810 - CHEN CHING-HWA [US], et al  
• US 5306985 A 19940426 - BERRY LEE A [US]  
• JP 2000243707 A 20000908 - MATSUSHITA ELECTRIC IND CO LTD

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DE IT

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**EP 1536671 A1 20050601**; **EP 1536671 A4 20060315**; AU 2003241714 A1 20031222; CN 100508689 C 20090701; CN 101553074 A 20091007; CN 101553074 B 20130102; CN 1659934 A 20050824; JP 2004014262 A 20040115; JP 3723783 B2 20051207; KR 100915725 B1 20090904; KR 100922904 B1 20091022; KR 20050013201 A 20050203; KR 20080075928 A 20080819; TW 200408317 A 20040516; TW I239795 B 20050911; US 2005172901 A1 20050811; US 2009074632 A1 20090319; US 7469654 B2 20081230; US 7940009 B2 20110510; WO 03105544 A1 20031218

DOCDB simple family (application)  
**EP 03730742 A 20030530**; AU 2003241714 A 20030530; CN 03813083 A 20030530; CN 200910135779 A 20030530; JP 0306901 W 20030530; JP 2002165504 A 20020606; KR 20047019643 A 20030530; KR 20087018772 A 20030530; TW 92115105 A 20030603; US 27465008 A 20081120; US 51562604 A 20041206